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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,473	06/04/2001	David Northway	PALM-3560	5316

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
2674	8

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Please find below and/or attached an Office communication concerning this application or proceeding.

PR

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/874,473	NORTHWAY ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Kimnhung Nguyen	2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 December 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

This application has been examined. The claims 1-29 are pending. The examination results are as following.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 9, 12, 25, 29 are rejected under 35 U.S.C. 102(b) as being anticipate by Higginbotham et al. (US patent 5,896,575).

Regarding claim 1, Higginbotham et al. disclose in figures 1 and 8 that a portable viewing and computing apparatus comprising a bus; a memory (810) coupled to the bus for storing data and instructions, a processor (808) coupled to bus for processing said data and instruction, a display device (114) coupled to the bus and comprising a view panel viewable from a front side (118, figure 2) and a back side (116, figure 1), wherein a first image (118, figure 2) is displayable on said front side and a second image (116, figure 1, see abstract) is displayable on said back side; and a display device controller coupled to the bus and for sensing orientation and rotate of the display device, and response thereto for controlling the display device (see display detector 606 to flip the displayed image in order to correct orientation of the image and moved from the first (closed) position to the second (open) position, see column 4, lines 34-40).

Regarding claims 2-4, and 25, Higginbotham et al. disclose wherein the display device controller is also for render data because it applied to a graphic display, see display having “MESSAGE” can be render black or other color (see figures 1-2, column 3, lines 18-20), stored in the memory (810, figure 8), viewable on the front side of said of the said display device when said front side is in a forward facing orientation relative to the user or viable on said back side of the display device when back side is in a forward facing orientation, relative to a user (see figures 1-2), and therefore, it cause rendering of first, second and third data on a first, second, third faces side of the portable and computing apparatus, and wherein the first facing side and the second facing side are different sides of the display device of the portable viewing and computing apparatus.

Regarding claim 5, Higginbotham et al. disclose wherein the display device controller senses and responds to the rotation of said display device (see detector 606 causes the correct orientation of the image in response to the display portion 102 move from the first (closed) position to the second (open) position), such that a rotation of said display device in a direction causes said display device, such that a rotation of said display device in a direction causes said display device controller to render data thereon a forward facing side, and a rotation in opposition to said direction causes said display device controller to an inherent re-render data previous rendered thereon a forward facing side.

Regarding claims 6, 9 and 29, Higginbotham et al. disclose wherein said data, stored in the memory is of an amount greater than can be display on a single side of said display device, because the total data stored into the two sides of display system always less than

or equal the data stored in the main memory, therefore, the data stored in the memory is of an amount greater than display on a single side of the display device. The portable viewing and computer system comprising an inherent data storage device adapted to receive SD (secure digital) cards and MMC (multimedia card and memory sticks). Regarding claim 12, Higgibotham et al. disclose the portable and computing apparatus, wherein the display device is transparent or the display device of the portable viewing and computing apparatus is transparent (see figure 3, column 3, lines 17-18, and see figure 3, display 14 comprising two transparent 306, see column 2, lines 54-67).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higginbotham et al. (US patent 5,896,575) in view of Moon (US patent 6,275,376).

Higginbotham et al. disclose a portable viewing and computing apparatus comprising a viewing panel viewable from a front side and back side as discussed in claim 1 above. However, Higgibotham et al. do not disclose wherein said rotation of the display device is about a vertical axis and about a horizontal axis. Moon discloses in figures 1A-1B, a portable electronic device is rotate about vertical axis (21) and horizontal axis (23) (see

column 5, lines 61-67 and column 6, lines 1-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using rotation of the display device is about a vertical axis and about a horizontal axis as taught by Moon into the a portable viewing and computing apparatus of Higginbotham et al. because this would help the user for providing opening or closing the portable computer and allowing the display cover to tile relative to the base about a theoretically infinite number of first axis (see Moon, column 6, lines 3-26).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higginbotham et al. (US patent 5,896,575) in view of Borgstrom et al. (US patent 6,593,908).  
Higginbotham et al. disclose a portable viewing and computing apparatus comprising a viewing panel viewable from a front side and back side as discussed in claim 1 above. However, Higginbotham et al. do not disclose the system comprising a communication device is wireless modem and also is Bluetooth enabled coupled to the bus and to the portable view and computing apparatus. Borgstrom et al. disclose in figure 1, a system comprising communication device is wireless modem and also is Bluetooth (see a pen is sent by a short range radio transmitter in the electronic pen 10, see local wireless radio

link supported by Ericson's Bluetooth, and sent to a PDA, see Borgstrom et al., column 4, lines 48-57 and column 6, lines 65-67, and see column 7, lines 1-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using communication device is wireless modem and also is Bluetooth modem as taught by Borgstrom et al. into the portable viewing and computing apparatus of Higginbotham et al. because this would for providing the user can get information via an appropriate link, such as a cellular air interface, to a base station or other network node.

7. Claims 13-18, 20, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higginbotham et al. (US patent 5,896,575) in view of Register (US patent 5,673,170).

Regarding claim 13, Higginbotham et al. disclose in figures 1-2 and 8, a system of portable computer comprising a palmtop computer system comprising a receive slot configured with a first hinge interface connector (106) disposed therein; and a portable viewing and computing apparatus comprising a bus a bus; a memory (810) coupled to the bus for storing data and instructions, a processor (808) coupled to bus for processing said data and instruction, a display device (114) coupled to the bus and comprising a view panel viewable from a front side (116, figure 1) and a back side (118, figure 2); and a display device controller coupled to the bus and for sensing orientation and rotate of the display device, and response thereto for controlling the display device (see display detector 606 to flip the displayed image in order to correct orientation of the image and moved from the first (closed) position to the second (open) position, see column 4, lines

34-40). However, Higginbotham et al. do not disclose a second hinge interface connector adapted to provide communicative coupling of said portable viewing and computing apparatus with said palmtop computer system, the second hinge interface connector is inserted in the receiving slot of palmtop computer system. Register discloses in figure 4 a display system comprising a first hinge (20) rotates to the axis (25) and a second hinge is also rotates on the second axis (48 or vertical axis). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using the second hinge rotates on the second axis as taught into the portable computer of Higginbotham et al. because this would for providing to the user having multiple views of the display image.

Regarding claims 14-16, Higginbotham et al. disclose wherein the display device controller is also for render data because it applied to a graphic display, see display having "MESSAGE" can be render black or other color (see figures 1-2, column 3, lines 18-20), stored in the memory (810, figure 8), viewable on the front side of said of the said display device when said front side is in a forward facing orientation relative to the user or viable on said back side of the display device when back side is in a forward facing orientation, relative to a user (see figures 1-2).

Regarding claim 20, Higginbotham et al disclose the portable viewing and computer system comprising an inherent data storage device adapted to receive SD (secure digital) cards and MMC (multimedia card and memory sticks).

Regarding claims 17 and 26, Higginbotham et al. disclose wherein the display device controller senses and responds to the rotation of said display device (see detector 606 causes the correct orientation of the image in response to the display portion 102 move from the first (closed) position to the second (open) position), such that a rotation of said display device in a direction causes said display device, such that a rotation of said display device in a direction causes said display device controller to render data thereon a forward facing side, and a rotation in opposition to said direction causes said display device controller to an inherent re-render data previous rendered thereon a forward facing side.

Regarding claim 18, Higginbotham et al. disclose wherein said data, stored in the memory is of an amount greater than can be displayed on a single side of said display device, because the total data stored into the two sides of display system always less than or equal the data stored in the main memory, therefore, the data stored in the memory is of an amount greater than display on a single side of the display device.

Regarding claim 24, Higginbotham et al. disclose the portable and computing apparatus, wherein the display device is transparent or the display device of the portable viewing and computing apparatus is transparent (see figure 3, column 3, lines 17-18, and see figure 3, display 14 comprising two transparent 306, see column 2, lines 54-67).

8. Claims 19, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higginbotham et al. (US patent 5,896,575) in view of Register (US patent 5,673,170) as applied to claim 13 above, and further in view of Moon (US patent 6,275,376).

Higginbotham et al. and Register disclose a system display comprising a first and a second hinge as discussed above in claim 13. However, they do not disclose wherein said rotation of the display device is about a vertical axis and about a horizontal axis. Moon discloses in figures 1A-1B, a portable electronic device is rotate about vertical axis (21) and horizontal axis (23) (see column 5, lines 61-67 and column 6, lines 1-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using rotation of the display device is about a vertical axis and about a horizontal axis as taught by Moon into the a portable viewing and computing apparatus of Higginbotham et al. and Register because this would help the user for providing opening or closing the portable computer and allowing the display cover to tile relative to the base about a theoretically infinite number of first axis (see Moon, column 6, lines 3-26).

9. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higginbotham et al. (US patent 5,896,575) in view of Register (US patent 5,673,170) as applied to claim 13 above, and further in view of Borgstrom et al. (US patent 6,593,908).

Higginbotham et al. and register disclose a portable viewing and computing apparatus comprising a viewing panel viewable from a front side and back side and two hinges as

discussed in claim 13 above. However, Higginbotham et al. and Register do not disclose the system comprising a communication device is wireless modem and also is Bluetooth enabled coupled to the bus and to the portable view and computing apparatus. Borgstrom et al. disclose in figure 1, a system comprising communication device is wireless modem and also is Bluetooth (see a pen is sent by a short range radio transmitter in the electronic pen 10, see local wireless radio link supported by Ericson's Bluetooth, and sent to a PDA, see column 4, lines 48-57 and column 6, lines 65-67, and see column 7, lines 1-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using communication device is wireless modem and also is Bluetooth modem as taught by Borgstrom et al. into the portable viewing and computing apparatus of Higginbotham et al. because this would for providing the user can get information via an appropriate link, such as a cellular air interface, to a base station or other network node.

#### *Response To Arguments*

10. Applicant's arguments filed on 12-19-03 have been fully considered but they are not persuasive.

Applicant argues that Higginbotham et al. do not teach, "a first image is displayable on said front side and a second images is displayable on said back side". However, examiner respectfully disagrees with the argument because figures 1-2 show a first image (118) on the front side and a second image (116) on the back side (see abstract).

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on (703) 305-4709.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D. C. 20231

**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only).**

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen  
May 20, 2004

  
5/24/04  
RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600